# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Judith Schwabe et al.

SERIAL NO.: Unassigned

FILING DATE: Herewith

TITLE: OPTIMIZATION OF N-BASE TYPED ARITHMETIC

    INSTRUCTIONS VIA REWORK

EXAMINER: Unassigned

ART UNIT: Unassigned

---

## CERTIFICATE OF EXPRESS MAILING

I hereby certify that this paper is being deposited with the United States Postal Service as Express Mail Mail No.: <u>EV 263 601 024 US</u> in an envelope addressed to: Commissioner for Patents, Mail Stop: Patent Application P.O. Box 1450, Alexandria, VA 22313 on the date printed below:

Date: _____ *11 - 12 - 03* _____   Name: _____

                Carol Diez

---

MAIL STOP: PATENT APPLICATION
COMMISSIONER FOR PATENTS
P.O. BOX 1450
ALEXANDRIA, VA 22313

## INFORMATION DISCLOSURE STATEMENT

Each item of information listed in the attached FORM PTO-1449, for which a copy of each is attached, may be material to the examination of the above-identified application and is, therefore, submitted in compliance with the duty of disclosure defined in 37 CFR §§ 1.56, 1.97 and 1.98. The Examiner is requested to make these items of official record in this application.

This Information Disclosure Statement under 37 CFR §§ 1.56, 1.97 and 1.98 is not

to be construed as a representation that a search has been made, that additional

information material to the examination of this application does not exist, or that any one

or more of these items constitutes prior art.

## I

This statement is filed pursuant to:

(X)     37 C.F.R. § 1.97(b).
> This information disclosure statement is filed either (1) within three months of the filing date of a national application other than a continued prosecution application under §1.53(d); (2) within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application; (3) before the mailing date of a first office action on the merits, or (4) before the mailing of a first office action after the filing of a Request for Continued Examination under 37 C.F.R. § 1.114, whichever event occurs last.
>
> Accordingly, this information disclosure statement requires no fee and no certification.

( )     37 C.F.R. § 1.97(c).
> This information disclosure statement is filed after the period specified in 37 C.F.R. § 1.97 (b), but before the mailing date of either (1) a final action under 37 C.F.R. § 1.113; (2) a notice of allowance under 37 C.F.R. § 1.311; or (3) an action that otherwise closes prosecution in the application.
>
> Accordingly, this information disclosure statement requires either the fee specified in 37 C.F.R. § 1.17 (p) for submission of an information disclosure statement under 37 C.F.R. § 1.97 (c) ($180); or a certification according to 37 C.F.R. § 1.97 (e).

( )     37 C.F.R. § 1.97(d).
> This information disclosure statement is filed after the period specified in 37 C.F.R. § 1.97 (c).
>
> Accordingly, this information disclosure statement requires the fee specified in 37 C.F.R. § 1.17 (p) to consider an information disclosure statement under 37 C.F.R. § 1.97(d) ($180), and a certification according to 37 C.F.R. § 1.97(e).

If this statement crosses in the mail with an office action, or is otherwise not in the

indicated category of 37 C.F.R. § 1.97, it is respectfully requested that this statement be

treated in the next appropriate category and made of record. To the extent required,

please treat this paper as a conditional petition for acceptance of the information

disclosure statement.

## II

(x)    No fee is due.

( )    The fee specified in 37 C.F.R. § 1.17(p) for submission of an information disclosure statement under 37 C.F.R. § 1.97(c) is enclosed ($180).

Please charge any additional required fee or credit any overpayment to our deposit

account number 50-1698.  An additional copy of this page is enclosed.

## III

Pursuant to 37 C.F.R. § 1.97(e) , I certify:

(X)    No certification is necessary.

( )    (1)    Each item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the statement.

( )    (2)    No item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c), more than three months prior to the filing of the statement.

Respectfully submitted,
THELEN REID & PRIEST LLP

Dated: November 12, 2003

John P. Schaub
Reg. No. 42,125

THELEN REID & PRIEST LLP
P.O. Box 640640
San Jose, CA 95164-0640
(408) 292-5800

| Form PTO 1449 ·<br>(Rev. 2-32)　　U.S. Department of Commerce<br>Patent and Trademark Office | | | Atty. Docket No.<br>SUN-P4181 | | Serial No.<br>Unassigned | | |
|---|---|---|---|---|---|---|---|
| **Information Disclosure Statement by Applicant** | | | Applicant:　Judith Schwabe et al. | | | | |
| (Use several sheets if necessary) | | | Filed:　Herewith　　　Group: Unassigned | | | | |

### U.S. Patent Documents

| Init. | | Document No. | Date | Name | Class | Subclass | Filing Date |
|---|---|---|---|---|---|---|---|
| | A | 5,408,670 | 4/18/95 | Davies | | | |
| | B | 4,400,769 | 8/23/93 | Kaneda et al. | | | |
| | C | 5,305,456 | 4/19/94 | Boitana | | | |
| | D | 5,740,441 | 4/14/98 | Yellin et al. | | | |
| | E | 5,784,553 | 7/21/98 | Kolawa et al. | | | |
| | F | 5,794,049 | 8/11/98 | Lindholm | | | |
| | G | 5,920,720 | 7/99 | Toutonghi et al. | | | |
| | H | 5,999,731 | 12/99 | Yellin et al. | | | |
| | I | 6,003,038 | 12/99 | Chen | | | |
| | J | 6,026,237 | 2/00 | Berry et al. | | | |
| | K | 6,075,863 | 6/00 | Krishnan et al. | | | |
| | L | 6,093,216 | 7/00 | Adi-Tabatabai et al. | | | |
| | M | 6,477,702 | 11/5/02 | Yellin et al. | | | |
| | N | 6,308,317 | 10/23/01 | Wilkinson et al. | | | |
| | O | 5,446,901 | 8/29/95 | Owicki et al. | | | |
| | P | 5,884,316 | 3/16/99 | Bernstein et al. | | | |
| | Q | 6,182,158 | 1/30/01 | Kougiouris et al. | | | |
| | R | 6,212,633 | 4/3/01 | Levy et al. | | | |
| | S | 5,668,999 | 9/16/97 | Gosling | | | |
| | T | 5,732,263 | 3/24/98 | Havens et al. | | | |
| | U | 6,092,147 | 7/18/00 | Levy et al. | | | |
| | V | 3,805,045 | 4/16/74 | Larsen | | | |
| | W | 3,993,891 | 11/23/76 | Beck et al. | | | |
| | X | 4,504,924 | 3/12/85 | Cook et al. | | | |
| | Y | 5,497,340 | 3/5/96 | Uramoto et al. | | | |
| | Z | 5,606,677 | 2/25/97 | Balmer et al. | | | |
| | AA | 5,724,279 | 3/3/98 | Benaloh et al. | | | |

### Foreign Documents

| Init. | | Document No. | Date | Country | Class | Subclass | Translation | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Yes | No |
| | | | | | | | | |

### Other Documents (Including Author, Title, Date, Pertinent Pages, etc.)

| Examiner | Date Considered |
|---|---|
| | |

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.

| Form PTO 1449<br>(Rev. 2-32)   U.S. Department of Commerce<br>Patent and Trademark Office | Atty. Docket No.<br>SUN-P4181 | Serial No.<br>Unassigned |
|---|---|---|
| **Information Disclosure Statement by Applicant** | Applicant:   Judith Schwabe et al. | |
| (Use several sheets if necessary) | Filed:  Herewith         Group: Unassigned | |

**Foreign Documents**

| Init. | | Document No. | Date | Country | Class | Subclass | Translation Yes | No |
|---|---|---|---|---|---|---|---|---|
| | BB | EP 0 778 522 A2 | 6/11/97 | Europe | | | X | |
| | CC | WO 01/14958 | 3/1/01 | France | | | X | |

**Other Documents (Including Author, Title, Date, Pertinent Pages, etc.)**

| | | |
|---|---|---|
| | DD | Sun Microsystems, Inc., "Java Card™ 20. Developer's Guide, August 19, 1998, Revision 1.12. |
| | EE | Sun Microsystems, Inc., "Java Card™ 2.0 Application Programming Interfaces", October 13, 1997, Rev. 1.0 |
| | FF | Sun Microsystems, Inc., "Java Card™ 2.0 Language Subset and Virtual Machine Specification", October 13, 1997, Revision 1.0 Final |
| | GG | Sun Microsystems, Inc., "Java Card™ 2.0 Programming Concepts", October 15, 1997, Rev. 1.0 Final |
| | HH | Sun Microsystems, Inc., "Java Card™ 2.1 Application Programming Interface", June 7, 1999, Final Rev. 1.1 |
| | II | Sun Microsystems, Inc., "Java Card™ 2.1 Runtime Environment (JCRE) Specification", June 7, 1999, Final Revision 1.1 |
| | JJ | Sun Microsystems, Inc., "Java Card™ 2.1 Virtual Machine Specification", June 7, 1999, Final Rev. 1.1 |
| | KK | Sun Microsystems, Inc., "Release Notes- Java Card™ 2.1 Specifications", June 7, 1999, Final Rev. 1.1 |
| | LL | Sun Microsystems, Inc., "Java Check™ 3.0 Frequently Asked Questions", printed from http://java.sun.com/products/personaljava/jcheckfaq30-beta.html, on 12/3/99. |
| | MM | Sun Microsystems, Inc., "Java Check™ Technical Notice", printed from http://java.sun.com/products/personaljava/JcheckTechNotice.html, on 12/3/99. |
| | NN | Sun Microsystems, Inc., "Using Java Check™", Version 2.0.1, printed from www.sun.com/software/personaljava/techinfo.html, on 12/3/99. |
| | OO | Sun Microsystems, Inc., "Using Java Check™", Version 3.0, printed from http://java.sun.com/cgi-bin/download2.cgi, on 12/3/99. |
| | PP | Sun Microsystems, Inc., "The K Virtual Machine (KVM)", White Paper 6/8/99 |
| | QQ | Ritchey, Tim, "Advanced Topics: The Java Virtual Machine" *JAVA!*, Chapter 14, pp. 25-346, Sept. 22, 1995 |
| | RR | Daniels, John et al., "Strategies For Sharing Objects In Distributed Systems", JOOP, Object Designers Ltd. UK, pp. 27-36 |
| | SS | Michael Shuttle et al., "Exact Rounding of Certain Elementary Functions", June 29, 1993, pp. 138-145 |
| | TT | Ziv, Abraham, "Fast Evaluation of Elementary Mathematical Functions with Correctly Rounded Last Bit", September 1, 1991, pp. 410-423 |
| | UU | George E. Necula et al., "Proof Carrying Code", November 1996, pp. 1-60 |

| Examiner | Date Considered |
|---|---|

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include a copy of this form with the next communication to applicant.